



No. 871	AUTHOR: James C. Pitman, Wildlife Research Biologist	Date 7/16/04
	TITLE: 2004 Spring Ring-Necked Pheasant Survey	

Abstract: *A total of 108 ring-necked pheasants was heard at 77 stops along four 20-mile survey routes in 2004 (1.38 pheasants heard per stop). The four survey routes are located in Benton (3 routes) and Newton (1 route) Counties. The number of roosters counted was similar to the number counted during the most recent survey, which was conducted in 2002 (1.46 pheasants heard per stop). The relatively mild winter probably increased over-winter survival and somewhat offset the perceived poor production last summer due to heavy July rains*

The ring-necked pheasant is the most popular gamebird throughout the Midwest. The most recent small game harvest survey (conducted following the 2000 season) was used to estimate that 30,000 hunters harvested 40,000 birds in Indiana. Unfortunately, a high percentage of those birds were pen-reared birds shot during put-and-take hunts on state fish and wildlife areas or privately owned game farms. When the Indiana wild pheasant population was at its peak during the late 1960's and early 1970's there were an estimated 75,000 people who hunted pheasants. Those hunters annually killed over 100-135 thousand birds, most of which were wild. Since that time our pheasant population and other small game populations have declined dramatically.

The most likely reason for the decline in our pheasant population is the substantial loss of suitable habitat for nesting and raising young. In the late 1960's and early 1970's there was annually >4 million acres of farmland idled in U.S. Department of Agriculture (USDA) land-retirement programs (e.g. soil bank, emergency feed grain, etc.). These programs have since been eliminated and those idled acres have been returned to production agriculture. Programs in the current farm bill are beneficial to pheasants but due to a competitive bidding process it is difficult for Hoosier farmers to get their land enrolled in the programs. Because of this difficulty there is currently only 277,000 acres of idled farmland in Indiana. This equates into a >90% loss of potential gamebird habitat compared to the late 1960's and early 1970's. This huge loss of habitat also has devastated our quail and rabbit populations.

The Indiana Division of Fish and Wildlife has conducted an annual spring pheasant survey since 1976 (except in 2003). The results from this survey are used to monitor the breeding population of male ring-necked pheasants in the primary pheasant range relative to changes in land-use practices. The results are also used to formulate management priorities and evaluate existing habitat improvement programs.

METHODS

The Indiana Division of Fish and Wildlife has conducted a spring pheasant survey along 4 routes in Benton (3 routes) and Newton (1 route) Counties since 1976 (except in 2003). Each route consists of 20 stops (approximately 1 mile apart) at which the observer counts the number of crowing pheasants heard during a 2 minute interval. Each survey route was started approximately 30 minutes before sunrise and counts were only recorded on days of no precipitation and winds < 18mph. In 2004, all 4 routes were surveyed between 5 May and 11 May. The counts were standardized to the number of roosters heard per survey stop. Every 5 years an additional 11 routes are surveyed throughout the pheasant range in northern Indiana. The complete set of routes was last surveyed in 2001 and will be surveyed again during the spring of 2006.

RESULTS

In 2004, crowing pheasants were counted along four 20-mile routes in Benton (3 routes) and Newton Counties (1 route). Along these routes a total of 108 birds were heard at 77 acceptable stops (1.38 birds per stop). The 2004 results were similar to results from the most recent survey conducted in 2002 (1.46 birds per stop). However, the 1.38 birds heard per stop in 2004 was 57.3% below the long-term average from 1976-2004 (3.23 birds heard per stop) and the lowest since the record low count in 2001 (0.81 birds heard per stop) (Figure 1). The additional eleven 5-year routes were not surveyed in 2004 and are not scheduled to be surveyed again until 2006 (Figure 1).

DISCUSSION

The male pheasant population in Benton and Newton Counties is similar to the 2002 population. Heavy rains throughout much of Indiana's pheasant range in July 2003 occurred at the time nests were hatching or hens were rearing young broods. These heavy rains and concurrent flooding undoubtedly depressed chick survival but over-winter survival was probably better than average due to the relatively mild winter in 2003-2004 compared to most years. The better-than-average over-winter survival could have somewhat offset the poor production that most likely occurred in 2003. However, data was not collected in 2003 so it is not possible to determine if abundance of roosters is different in 2004 compared to the previous year. Nevertheless, the number of crowing roosters heard in 2004 is well below the long-term average over the last 28 years.

Although it is unlikely that the Indiana pheasant population will ever resemble the number of birds that existed during the "glory days" of 35 years ago, there are things that landowners can do to substantially improve conditions for birds on their land. The easiest thing landowners can do is to delay mowing waterways and ditches as long as possible (preferably mid-August) so that the birds will have a safe place to nest and raise their young. There are also several state and federal programs available to landowners that provide monetary sign-up incentives or cost-share money for the establishment and/or maintenance of gamebird habitat.

The greatest ray of hope for Indiana's pheasant population is the relatively new Continuous Conservation Reserve Program (CCRP) administered by the USDA Farm Service Agency (FSA). All land adjacent to a water source (e.g. river, ditch, lake, etc.) will be accepted automatically into

this program for a contract length of 10 or 15 years. The landowner will receive a sign-up incentive payment and annual rental payments equal to 120% of the average soil-rental rate in their county. These areas will provide much-needed nesting cover for pheasants and other gamebirds. There also are several cost-share programs available through the Natural Resource Conservation Service (NRCS) and the Indiana Division of Fish and Wildlife where the landowner can receive up to 90% of the necessary funds to establish or maintain gamebird habitat. For more information about these programs contact your local district biologist, NRCS district conservationist or visit the division of fish and wildlife's financial assistance web site (www.state.in.us/dnr/fishwild/hunt/aid.htm). Additionally, several Pheasants Forever Chapters are located throughout the state and most of them provide cost-share money for landowners to establish or maintain pheasant habitat on their property. Most of the Pheasants Forever Chapters will complete the habitat work themselves if the landowner does not have access to the necessary equipment. To find out more about their programs contact Indiana's regional Pheasants Forever Biologist by phone (574-202-4868) or E-mail (inpf@rtcol.com).

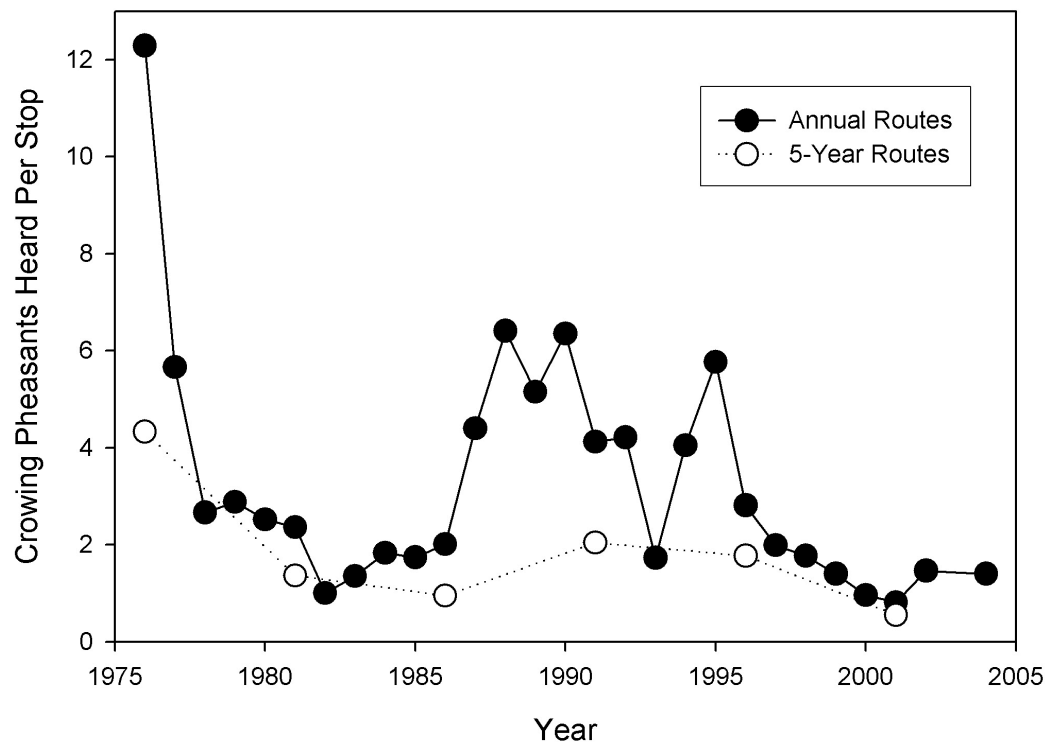


Figure 1. Mean number of crowing pheasants heard at each stop along 15 routes located throughout Indiana's pheasant range (open circles) and along 4 annually surveyed routes (solid circles) in Newton and Benton County, 1976-2004. The 15 routes throughout the pheasant range are surveyed at 5-year intervals and were last surveyed in 2001.